

REMARKS

Applicant expresses appreciation to the Examiner for consideration of the subject patent application. This amendment is in response to the final Office Action mailed November 2, 2004, in which claims 1-25 and 30 were pending and in which claims 1-25 and 30 were rejected.

A Request for Continued Examination is submitted herewith.

Claims 1, 4-10 and 30 remain in the application. Claims 2, 3 and 11-25 have been canceled by this Response. New claims 31-37 have been added. Support for new claims 31-37 is found in at least FIGs. 21-28 of the specification as filed. Claims 1, 4, 6 and 30 have been amended.

Claim Rejections - 35 U.S.C. § 102

Claims 1, 2, 4-7, 11, 18 and 26 (including independent claims 1, 11 and 18) were rejected under 35 U.S.C. § 102(b) as being anticipated by Garland. Claims 1, 2 and 4-7 were rejected under 35 U.S.C. § 102(b) as being anticipated by Richardson. Claims 11-13, 16-20 and 23-25 (including independent claims 11, 18 and 25) were rejected under 35 U.S.C. § 102(b) as being anticipated by Walter. Applicant respectfully traverses this rejection for the reasons set forth below.

Claim 2 has been canceled.

Claims 11-25 have been canceled, rendering the 102 rejection under Walter moot. Independent claim 1 has been amended. Accordingly, in order to most succinctly explain why the claims presented herein are not anticipated by the cited references, Applicant will direct the following remarks primarily to amended independent claim 1; with the understanding that once an independent claim is allowable, all claims depending therefrom are allowable.

The cited references fail to disclose each and every element of present claim 1. Amended claim 1 includes the limitations of:

A dental articulating device . . . comprising: . . .

- b) a pair of lower arms integrally formed with and extending from a lower tray;
- c) a pair of upper arms integrally formed with and extending from an upper tray;
- d) a pair of hinges, each disposed between a different one of the upper and the lower arms;
- e) the pair of hinges each being integrally formed with the arms and including:
 - i) a pivot axle, associated with one of the arms;

- ii) a shoulder, extending at least partially around the pivot axle and creating two axle portions extending on each side of the shoulder; and
- iii) a pair of opposing fingers, associated with another of the arms, with one of the pair of fingers contacting and extending at least partially about a first side of the axle while leaving a second side of the axle exposed, and with another of the pair of fingers contacting and extending about the second side of the axle while leaving the first side of the axle exposed . . . (emphasis added)

This configuration is most clearly shown in FIGs. 22, 25 and 27a and 27b, where opposing fingers 26a and 26b extend in different directions around different sides of axle portions 22a and 22b, respectively of axle 22. Thus, as shown in side view in FIG. 22, finger 26a extends around a top side of axle 22 and finger 26b extends around a bottom side of axle 22. In this manner, the fingers mate with the axle section in a nesting configuration, with each of the fingers contacting and supporting an opposite side of the axle. While each finger supports a respective side of the axle, however, each finger does not completely encircle the axle, but rather leaves the opposing side of the axle exposed. In this manner, the axle is fully supported by the pair of fingers through a range of rotation but is not completely encircled by any one finger. This configuration results in a secure interface between the fingers and the axle while allowing the fingers and axles to be disengaged when desired, and also to rotate freely through a range of rotation.

In contrast, the Garland reference discloses a pair of fingers 40 which each nearly completely encircle a protrusion 46 and also extend around the same section of the protrusion 46 (e.g., the Garland fingers contact and support the protrusion along the same circumferential locations). The Richardson reference similarly discloses fingers 36 which nearly completely encircle axles 52 and also encircle the axles in the same circumferential locations. Thus, neither of the Garland and Richardson references anticipates claim 1.

Therefore, Applicant respectfully submits that independent claim 1, and dependent claims 4-7, are allowable over the references cited and urges the Examiner to withdraw the rejection.

Claim Rejections - 35 U.S.C. § 103

Claims 1-7, 9, 10 and 30 were rejected under 35 U.S.C. § 103 as being unpatentable over Walter in view of Garland. Claim 3 has been incorporated into claim 1 and canceled. Claim 2

has been canceled. Applicant respectfully traverses the rejection with respect to the remaining claims for the reasons set forth below.

The Walter reference fails to teach or suggest an axle and a pair of fingers encircling an axle, but rather shows a ball 5 which is disposed within a circular notch. Similarly, as discussed above, the Garland reference clearly teaches away from the present invention, as the Garland reference discloses a pair of fingers that each nearly completely encircle the axle.

In contrast, independent claim 1 sets forth:

A dental articulating device . . . comprising: . . .

- b) a pair of lower arms integrally formed with and extending from a lower tray;
- c) a pair of upper arms integrally formed with and extending from an upper tray;
- d) a pair of hinges, each disposed between a different one of the upper and the lower arms;
- e) the pair of hinges each being integrally formed with the arms and including:
 - i) a pivot axle, associated with one of the arms;
 - ii) a shoulder, extending at least partially around the pivot axle and creating two axle portions extending on each side of the shoulder; and
 - iii) a pair of opposing fingers, associated with another of the arms, with one of the pair of fingers contacting and extending at least partially about a first side of the axle while leaving a second side of the axle exposed, and with another of the pair of fingers contacting and extending about the second side of the axle while leaving the first side of the axle exposed . . . (emphasis added)

As discussed above, the claimed configuration provides a much more stable support for the arms while allowing free movement of the arms about a wide range of rotation

In addition, amended claim 30 recites the limitations of:

- A dental articulating device . . .
- a pair of arms . . . collectively defining an access opening therebetween, to allow an operator to access from a rear of the device objects disposed in or on the trays; and
 - a pair of hinges, disposed between the pair of arms, each hinge including:
 - i) a pivot axle collinear with respect to a pivot axle of the other hinge;
 - ii) a shoulder, extending at least partially around the pivot axle and creating two axle portions extending on each side of the shoulder; and
 - iii) a pair of fingers, associated with another of the trays, with two fingers pivotally positioned on opposite sides of the pivot axle and on opposite sides of the shoulder and separated by both the axle and the shoulder so that one of the pair of fingers is disposed on each side of the shoulder. (emphasis added).

None of the references cited in the Office Action teach or suggest the combination of a pair of arms which define an access opening with each of the arms including hinge structure having two fingers positioned on opposite sides of the pivot axle.

Accordingly, Applicant respectfully submits that independent claims 1 and 30, and dependent claims 4-7, 9, 10 and 31, are allowable, and urges the Examiner to withdraw the rejections.

CONCLUSION

In light of the above, Applicant respectfully submits that pending claims 1, 4-10 and 30-37 are in condition for allowance. Therefore, Applicant requests that the rejections and objections be withdrawn, and that the claims be allowed and passed to issue. If any impediment to the allowance of these claims remains after entry of this Response, the Examiner is strongly encouraged to call Garron M. Hobson at (801) 566-6633 so that such matters may be resolved as expeditiously as possible.

The Commissioner is hereby authorized to charge any additional fee or to credit any overpayment in connection with this Response to Deposit Account No. 20-0100.

DATED this 2nd day of February, 2005.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'G. Hobson', written over a horizontal line.

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